



UNITED STATES NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION DIVISION OF REACTOR PROGRAM MANAGEMENT EMERGENCY PREPAREDNESS AND RADIATION PROTECTION BRANCH

**SUBJECT: EMERGENCY PREPAREDNESS POSITION (EPPOS¹) ON EMERGENCY
PLAN AND IMPLEMENTING PROCEDURE CHANGES**

PURPOSE

1. To provide guidance to the staff for the determination of whether a change to an emergency plan (1) constitutes a decrease in effectiveness or (2) results in the plan, as changed, no longer meeting either the planning standards of §50.47(b) or the requirements of Appendix E to 10 CFR Part 50 for the facility.
2. To provide guidance to the staff for the review of changes to procedures that implement a licensee's emergency plan.
3. To provide guidance to the staff for the review of changes to licensee's emergency action levels.

APPLICABLE REGULATIONS

With regard to any change to emergency plans, 10 CFR 50.54(q) states, in part:

"A licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in §50.47(b) and the requirements in Appendix E to 10 CFR Part 50 ... The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not **decrease the effectiveness of the plan, and the plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50.** (Emphasis added) ... Proposed changes that decrease the effectiveness

¹ The **EPPOS Process**

- EPPOS are generated by NRR's EP&RP Branch (PERB) in response to requests for guidance from the Regional Offices or to otherwise address emergent issues.
- After drafting by NRR/PERB, EPPOS are sent to the Regions for comment. After incorporation of comments, the EPPOS are issued in final form and placed in the PDR. The need for concurrence from others outside NRR/PERB, such as the Office of General Counsel and the Office of Enforcement, is considered on a case-by-case basis.
- EPPOS are intended to be "living" documents, being assigned a revision number and a date of issuance. They will be revised from time to time as suggestions for improvement or other comments warrant. Comments may be received on existing EPPOS from NRC staff or from outside individuals or organizations.

of the approved emergency plans may not be implemented without application to and approval by the Commission."

Specifically, with regard to changes involving emergency action levels, Section IV.B, Appendix E to 10 CFR Part 50 states, in part:

"... These emergency action levels shall be discussed and agreed on by the applicant and State and local governmental authorities and **approved by NRC.**" (Emphasis added)

APPLICABLE GUIDANCE

Regulatory Guide (RG) 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revisions 2 and 3.

Revision 2, dated October 1981, endorsed NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," published November 1980, to provide specific acceptance criteria for complying with the standards of §50.47.

Revision 3, dated August 1992, endorsed NUMARC/NESP-007 (Revision 2, January 1992), "Methodology for Development of Emergency Action Levels," as an acceptable alternative method to that described in Appendix 1 to NUREG-0654/FEMA-REP-1 for developing emergency action levels (EALs) required in §50.47(b)(4) and Section IV.B of Appendix E to 10 CFR Part 50.

POSITION

1. Changes to Emergency Plans

The licensee is to follow and maintain in effect emergency plans which meet the standards in §50.47 and the requirements in Appendix E of 10 CFR Part 50. Apart from certain requirements in §50.59 and §50.71, the primary requirements concerning emergency plan changes are found in §50.54(q). This regulation allows a licensee to make certain changes to its approved emergency plan without Commission approval providing that the changes do not decrease the effectiveness of the plan. The need for such changes could result, for example, from exercise and drill findings, personnel reassignments, improvement in technology, licensee restructuring, sociopolitical changes in the vicinity of the plant, etc.

Emergency plan changes made unilaterally by the licensee without Commission approval under §50.54(q), must meet two provisions of the rule. First, the change must not decrease the effectiveness of the plan. Second, the plan, as changed, must continue to meet the planning standards in §50.47(b) and the requirements in Appendix E. Licensees should be requested to make available, either through the inspection process or in accordance with §50.4, the supporting documentation and analyses for plan changes whenever questions arise regarding decrease in effectiveness.

When a licensee submits an emergency plan change to the NRC under §50.54(q) indicating that there is no decrease in effectiveness and that the plan, as changed, continues to meet the

planning standards of §50.47(b) and requirements of Appendix E, NRC approval is not required; however, the NRC should review the change if there are concerns regarding the licensee's determination. The change will also be subject to inspection to confirm that the change has not decreased the effectiveness of the emergency plan and the plan, as changed, continues to meet regulatory requirements.

When making §50.54(q) determinations, the inspector should review the change against the latest approved plan. In the past, NRC may have undertaken a review of a plan change and, based upon a satisfactory result, may have approved the change even though NRC approval was not required. Consequently, the "latest approved plan" is the last one reviewed by the NRC that received unconditional (i.e., reviewed and not subject to future inspection) NRC approval for the issuance or continuance of an operating license. Either an NRC inspection report or safety evaluation report could result in approval of the emergency plan. As a result of the changes made by licensees and the timing of NRC reviews and inspections, the latest approved plan may not necessarily be the current one in effect. In order to determine which revision to a licensee's emergency plan is the latest approved plan, the inspector needs to review previous correspondence and emergency planning inspection and safety evaluation reports for the facility.

NRR staff continues to monitor the Commission's actions regarding other processes that allow licensees to make changes based on their own determinations, namely the §50.59 process. When the Commission takes final action on that or other analogous processes, the staff will determine whether a revision is appropriate for the §50.54(q) process or whether it is necessary to revise the guidance provided in this EPPOS or both.

a. Decrease in Effectiveness

In performing §50.54(q) reviews, the inspector should determine whether the change in the emergency plan involves a change in a commitment by the licensee. The following definition for an emergency planning commitment should be used:

Emergency planning commitment: A statement made by the licensee in the emergency plan that affects the licensee's capability or resources (e.g., personnel, equipment) for responding to an emergency.

If the change involves a commitment, then the inspector should compare the change to the commitment in the latest approved plan. **If the revised plan involves a reduction in commitment by the licensee without a commensurate reduction in the bases for that commitment, then that change constitutes a decrease in the effectiveness of the plan.** It is improper to assume that every reduction in commitment constitutes a decrease in effectiveness of the plan. For example, a change to an emergency plan to eliminate the commitment to have an annual emergency preparedness exercise does not constitute a decrease in effectiveness because the basis for that commitment, the annual exercise requirement, was changed.

The following rationale should be used for determining whether a plan change results in a decrease in effectiveness:

A reduction in an emergency planning commitment without a commensurate reduction in the bases for that commitment constitutes a decrease in effectiveness of the plan.

For changes that decrease the effectiveness of the plan, the licensee must request an evaluation of the change from the Commission prior to implementation. Example of changes that could decrease the effectiveness of the plan include, but are not limited to, changes that (1) involve a reduction in capabilities, (2) result in a delay in response actions, or (3) have a negative impact on classification, notification or protective action recommendations. Plan changes that expand licensee capabilities and resources do not constitute a decrease in plan effectiveness unless they negatively impact other portions of the plan.

Certain activities, such as improvements in information technology and new analytical methods, may not result in a decrease in effectiveness, but may be an alternative method or solution for meeting a regulatory requirement different from those specified in NRC regulatory guidance documents. Although the licensee may determine that there would be no decrease in effectiveness by implementing an alternative method or solution which has not been endorsed the NRC, that alternative method or solution should be referred to the Office of Nuclear Reactor Regulation (NRR) for review and disposition. If the inspector determines that a licensee has decreased the effectiveness of the emergency plan without the approval of the NRC, then consideration of enforcement action would be appropriate.

b. Planning Standards and Requirements

In performing this evaluation, the inspector should determine whether the plan continues to meet the planning standards and requirements by using RG 1.101 criteria and other applicable requirements and commitments as a result of orders, enforcement actions, exercise weaknesses identified in inspection reports, etc. If the licensee used an alternative to RG 1.101 that was approved by NRC, either specifically for the facility or generically, then that alternative may be used in lieu of the RG 1.101 criteria. As indicated above, alternative methods or solutions that were neither endorsed previously by the NRC for that facility nor endorsed generically should be referred to NRR. If the inspector determines that an implemented change results in a plan that no longer meets a planning standard or no longer satisfies the requirements in Appendix E, then consideration of enforcement action would be appropriate.

2. Changes to Procedures Which Implement the Emergency Plan

Appendix E prescribes the information required to be contained in the emergency plan. The §50.54(q) process refers to changes that may be made to the emergency plan, not to procedures which implement the emergency plan. In some instances, the NRC has allowed the relocation of emergency plan information to implementing procedures based upon the staff's understanding that implementing procedures were a part of the emergency plan. In response to a request for legal advice as to whether emergency plan implementing procedures (EIPs) are a part of the emergency plan and, therefore, would receive the same level of review and determination under §50.54(q), the Office of General Counsel (OGC) concluded that EIPs or procedures which implement the emergency plan are not part of the emergency plan and, therefore, changes to these procedures are not subject to §50.54(q) review. If an EIP is *incorporated* into the emergency plan or is a *necessary* part thereof to comply with the requirements of Appendix E, then it *is* considered part of the plan and subject to §50.54(q) review; if it is merely referenced by the emergency plan, then it is *not* part of the plan.

The inspector should review emergency plan changes to determine whether prescribed information or licensee commitments have been removed from the plan and relocated to implementing procedures that may be outside the licensee's §50.54(q) review process. The inspector may determine that information has been removed from the emergency plan because the licensee determined that it is redundant to information contained in other licensing documents such as the Final Safety Analysis Report, Technical Specifications, etc. If the information is prescribed by Appendix E, then referencing other documents is not appropriate and the information needs to be placed back into the plan. The resolution of these matters should involve the Office of Nuclear Reactor Regulation as soon as the issue is identified to determine the appropriate course of action. It is the licensee's responsibility to assure that the removal of information from the emergency plan does not decrease the plan's effectiveness or result in non-compliance with regulations.

The inspector should assure that the licensee provides any changes to procedures which implement the emergency plan to the NRC in accordance with Section V, Appendix E and §50.4. Any procedure, regardless of its title, e.g., Administrative Procedure, Training Procedure, Chemistry Procedure, that implements the emergency plan are to be submitted to the NRC.

3. Clarification of Guidance Regarding Changes to Emergency Action Levels (EALs)

Changes made to the EALs are considered to be a special case. Appendix E, Section IV.B, "Assessment Actions," which indicates that EALs are to be included in the emergency plan, states, in part: " ... These emergency action levels shall be discussed and agreed on by the applicant and State and local governmental authorities and approved by NRC ... "

NRC's previous practice permitted licensees to make changes to EALs subsequent to agreement with State and local governmental authorities under §50.54(q) prior to NRC approval. In response to a request for legal advice as to whether prior staff approval of those changes is only required where the change involves a decrease in effectiveness of the emergency plans under §50.54(q), OGC concluded that licensees are required to obtain State and local agreement and NRC approval of any proposed revisions to their EAL classification schemes prior to implementation.

Excluding purely administrative changes such as correction of typographical errors, the NRC must review and approve changes to EALs. The §50.54(q) process, which allows licensees to make certain changes without prior Commission approval, does not extend to EALs; this is a significant clarification. Section IV.B of Appendix E specifically requires that EALs be approved by the NRC. Consequently, the NRC must approve all changes to licensee's EALs prior to their implementation.

NRR intends to issue a generic communication to all holders of operating licenses or construction permits for nuclear power plants, informing them of the change in the staff's practice. Until this generic communication is issued, review of EAL changes made without prior NRC approval should be expedited to determine whether the revised EALs are acceptable. An EAL is acceptable if (1) it meets the guidance for EALs provided in RG 1.101, i.e., NUREG-0654 or NUMARC/NESP-007, Revision 2, or (2) deviations from the guidance are justified such that the EAL is determined to meet the intent of the guidance. The inspector should request the assistance of NRR in reviewing significant EAL changes.

SUMMARY

The NRC expects licensees to carefully review changes to their emergency plans and objectively determine whether the changes can be made under the provisions of §50.54(q) without prior NRC approval. Emergency plans have been approved on a site specific basis. Changes must be appropriate for the particular facility and site. A change approved at one site does not mean that the same, or a similar, change is applicable to another site. The licensee bears the responsibility for ensuring that changes made without NRC approval do not decrease the effectiveness of the plan.

The emergency plan remains the "enforceable document," and all reviews of plan changes will be based upon the statements contained within those plans. It is incumbent upon licensees to keep their plans accurate and meet the timeliness requirements for updating plans and submitting changes as stated in §50.71(e) and §50.54(q). NRC regional staff should continue to screen all changes and should refer questionable or policy-related changes to NRR for review and disposition to ensure staff consistency.

A set of questions and screening criteria to assist the inspector in the review of licensee changes to emergency plans is attached.

ATTACHMENT: As Stated

SCREENING CRITERIA OUTLINE
[ASSESSMENT OF LICENSEE'S DETERMINATION OF 10 CFR 50.54(q) PLAN CHANGE(S)]

BACKGROUND INFORMATION:

List the emergency plan revisions and section and title of change(s).

List the latest approved plan and reference to approval document.

EMERGENCY PLAN COMMITMENT:

Identify whether the change(s) involve any emergency plan commitments.

If the change involves a commitment, specify the relevant commitment.

IMPACT OF CHANGE(S) ON EFFECTIVENESS OF EMERGENCY PLAN:

In order to determine the impact of a change on the effectiveness of the emergency plan, the inspector should follow this section of the outline which requires responses to a series of questions for each change. If the response to each question is "no" and the rationale supports a "no" response, then the change may be considered acceptable in accordance with the provisions of §50.54(q) and no further NRC review is needed. However, if the response is "yes" to any of the four questions, then NRC approval is required and the licensee must apply to the NRC for approval of the revision or change in accordance with §50.54(q). The questions are as follows:

1. ☐Yes ☐No DOES THIS CHANGE INVOLVE A DECREASE IN EFFECTIVENESS OF THE PLAN AS DETERMINED BY AN EXAMINATION OF THE EMERGENCY PLANNING COMMITMENTS AND THE BASES FOR THOSE COMMITMENTS?

- THE INSPECTOR SHOULD REVIEW THE EMERGENCY PLAN CHANGE TO DETERMINE WHETHER THE CHANGE AFFECTS AN EMERGENCY PLANNING COMMITMENT. AN EMERGENCY PLANNING COMMITMENT IS DEFINED AS A STATEMENT MADE BY THE LICENSEE IN THE EMERGENCY PLAN THAT AFFECTS THE LICENSEE'S CAPABILITY OR RESOURCES (e.g., PERSONNEL, EQUIPMENT) FOR RESPONDING TO AN EMERGENCY.

- THE INSPECTOR SHOULD DETERMINE WHETHER THERE HAS BEEN A DECREASE IN EFFECTIVENESS OF THE PLAN BY DETERMINING WHETHER THERE HAS BEEN A CHANGE OR REDUCTION IN A COMMITMENT WITHOUT A COMMENSURATE REDUCTION OR CHANGE IN THE BASES FOR THAT COMMITMENT.

2. ☐Yes ☐No DOES THE EMERGENCY PLAN, AS CHANGED, INVOLVE A FAILURE TO MEET ANY OF THE 16 PLANNING STANDARDS OF 10 CFR 50.47(b) OR THE REQUIREMENTS OF APPENDIX E TO 10 CFR PART 50?

- THE INSPECTOR SHOULD DETERMINE WHETHER THE PLAN, AS CHANGED, STILL CONTINUES TO MEET THE PLANNING STANDARDS AND REQUIREMENTS OF APPENDIX E BY USING RG 1.101 CRITERIA AND OTHER APPLICABLE SITE-SPECIFIC REQUIREMENTS AS A RESULT OF ORDERS, ENFORCEMENT ACTIONS, EXERCISE WEAKNESSES IDENTIFIED IN INSPECTION REPORTS, ETC.

3. ☐Yes ☐No DOES THIS CHANGE REPRESENT AN ALTERNATE METHOD OR SOLUTION TO MEETING THE PLANNING STANDARDS OR REQUIREMENTS OF THE REGULATIONS THAN WAS USED IN THE LATEST APPROVED PLAN?

- IF THE CHANGE INVOLVES AN ALTERNATE APPROACH TO THE LATEST APPROVED PLAN, THEN THE CHANGE SHOULD BE FORWARDED TO NRR FOR REVIEW AND DISPOSITION

4. ☐Yes☐No DOES THIS CHANGE INVOLVE EMERGENCY ACTION LEVEL(s)? NRC APPROVAL IS REQUIRED FOR ANY CHANGE MADE TO EAL(s).

- IF THE CHANGES DO NOT DECREASE THE EFFECTIVENESS OF THE EAL(s), THE REGION SHOULD ISSUE A RESPONSE TO THE LICENSEE. IF THE CHANGES APPEAR TO DECREASE THE EFFECTIVENESS OF THE EAL(s), SUCH AS (a) ADOPT AN EAL METHODOLOGY OTHER THAN ONE APPROVED BY THE NRC, (b) DELETE AN EAL, (c) ADD AN EAL, OR (d) CHANGE A SET POINT FOR AN EAL, THEN THE REGION SHOULD CONTACT NRR TO DETERMINE THE APPROPRIATE COURSE OF ACTION .

INSPECTOR ACTIONS:

- If the answers to all four questions for each change is "no," then the response to the licensee regarding the emergency plan change or revision should be as shown in Enclosure 1.
- If the response to any of the first two questions for any change is "yes," then enforcement action should be considered.
- If the response to the third question for any change is "yes," then refer the change to the Office of Nuclear Reactor Regulation for its review and disposition.
- If the response to question four is "yes" and it is determined that the resulting EALs are satisfactory, then the response to the licensee regarding the emergency action level change or revision should be as shown at Enclosure 2. If the EAL change is not satisfactory, then enforcement action should be considered.

Enclosures: As Stated

Sample letter for Emergency Plan changes which do not appear to result in a decrease effectiveness and the plan, as changed, continue to meet regulatory requirements.

SUBJECT: EMERGENCY PLAN CHANGES

This letter acknowledges receipt of your letter dated _____, which transmitted changes to the Emergency Plan for the _____ submitted under the provisions of 10 CFR 50.54(q).

Based on your determinations that the changes do not decrease the effectiveness of your emergency plan, and that the plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to Part 50, NRC approval is not required. A preliminary review of these changes indicates that the changes are in accordance with 10 CFR 50.54(q). Implementation of these changes will be subject to inspection to confirm that they have not decreased the effectiveness of your emergency plan and continue to meet regulatory requirements.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter will be placed in the NRC Public Document Room.

Sincerely,

Docket No.:

Sample letter for Emergency Action Level changes that the licensee has determined to be acceptable.

SUBJECT: EMERGENCY ACTION LEVEL CHANGES

This letter acknowledges receipt of your letter dated _____, which transmitted changes to the Emergency Plan for the _____ submitted under the provisions of 10 CFR 50.54(q). These changes included revisions to the Emergency Action Levels (EALs).

Licensees may make changes to their emergency plan that do not decrease the effectiveness of the plan under §50.54(q) without prior NRC approval. However, Section IV.B of Appendix E to 10 CFR Part 50, requires NRC approval of EALs. Consequently, we have reviewed these EAL changes and determined that they are acceptable. Therefore, these EAL changes are approved.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter will be placed in the NRC Public Document Room.

Sincerely,

Attachment: As stated
Docket No.: